\_\_\_\_\_

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)

217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=7; day=17; hr=13; min=43; sec=14; ms=123; ]

\_\_\_\_\_\_

\*\*\*\*\*\*\*\*\*\*\*\*

Reviewer Comments:

<210> 25

<211> 57

<212> DNA

<213> Artificial

<220>

<223> Second strand of siRNA expression cassette

<223> OTHER INFORMATION: n is a, t, c, g, other or unknown

<400> 24

aattaaaaaa nnnnnnnnn nnnnnnnnt ctcttgaann nnnnnnnnn nnnnnnn

57

Please show a separate <220>-<223> section for describing the n's.

<220>

<221> indicate the NAME/KEY: response

<222> indicate the locations of the n's

<223> OTHER INFORMATION: n is a, t, c, g, other or unknown

This error also appears in Sequence 24.

IMPORTANT: The above "<400>24" line is incorrect; since this is Sequence 25, it should be "<400>25"

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## Validated By CRFValidator v 1.0.3

Application No: 10721693 Version No: 2.0

Input Set:

Output Set:

**Started:** 2009-07-14 16:32:59.318

Finished: 2009-07-14 16:33:04.853

**Elapsed:** 0 hr(s) 0 min(s) 5 sec(s) 535 ms

Total Warnings: 2
Total Errors: 76

No. of SeqIDs Defined: 25

Actual SeqID Count: 25

Error code		Error Description
W	213	Artificial or Unknown found in <213> in SEQ ID (24)
E	342	'n' position not defined found at POS: 3 SEQID(24)
Ε	342	'n' position not defined found at POS: 4 SEQID(24)
E	342	'n' position not defined found at POS: 5 SEQID(24)
E	342	'n' position not defined found at POS: 6 SEQID(24)
E	342	'n' position not defined found at POS: 7 SEQID(24)
E	342	'n' position not defined found at POS: 8 SEQID(24)
Ε	342	'n' position not defined found at POS: 9 SEQID(24)
E	342	'n' position not defined found at POS: 10 SEQID(24)
E	342	'n' position not defined found at POS: 11 SEQID(24)
E	342	'n' position not defined found at POS: 12 SEQID(24)
E	342	'n' position not defined found at POS: 13 SEQID(24)
E	342	'n' position not defined found at POS: 14 SEQID(24)
E	342	'n' position not defined found at POS: 15 SEQID(24)
E	342	'n' position not defined found at POS: 16 SEQID(24)
E	342	'n' position not defined found at POS: 17 SEQID(24)
E	342	'n' position not defined found at POS: 18 SEQID(24)
E	342	'n' position not defined found at POS: 19 SEQID(24)
E	342	'n' position not defined found at POS: 20 SEQID(24)
E	342	'n' position not defined found at POS: 21 SEQID(24)

## Input Set:

## Output Set:

**Started:** 2009-07-14 16:32:59.318

Finished: 2009-07-14 16:33:04.853

**Elapsed:** 0 hr(s) 0 min(s) 5 sec(s) 535 ms

Total Warnings: 2

Total Errors: 76

No. of SeqIDs Defined: 25

Actual SeqID Count: 25

Error code		Error Description					
E	342	'n' position not defined found at POS: 31 SEQID(24) This error has occured more than 20 times, will not be displayed					
W	213	Artificial or Unknown found in <213> in SEQ ID (25)					

## SEQUENCE LISTING

<110>	KAEMMERER, WILLIAM F.	
<120>	TREATMENT OF NEURODEGENERATIVE DISEASE THROUGH INTRACRANIAL DELIVERY OF SIRNA	
<130>	48169.00016	
	10721693 2003-11-25	
	60/444,614 2003-02-03	
	60/429,387 2002-11-26	
<160>	25	
<170>	PatentIn version 3.3	
<210><211><211><212><213>	21	
<400>	1 agagc ggagcaacga a	21
<210><211><211><212><213>	21	
<400> aattco	2 gttge teegetettg g	21
<210><211><211><212><213>	21	
<400>	3 agagc ggagcaacga a	21
<210><211><211><212>	21 DNA	
<400>	Homo sapiens  4 gttgc tccgctcttg g	21

```
<210> 5
<211> 21
<212> DNA
<213> Homo sapiens
<400> 5
aaccagtacg tccacatttc c
                                                                       21
<210> 6
<211> 21
<212> DNA
<213> Homo sapiens
<400> 6
                                                                       21
aaggaaatgt ggacgtactg g
<210> 7
<211> 145606
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)..(145606)
<223> LOCUS AF163864;145606 bp;DNA;linear;P
      RI 24-JAN-2001
      DEFINITION Homo sapiens SNCA isoform (SNCA) gene
      ACCESSION AF163864
<300>
<308> AF163864
<309> 2001-01-24
<313> (1)..(145606)
<400> 7
aattttcctt gaaaaacata gatgtccagt tctatctctc atattttttc ttttcataga
                                                                       60
gatatggcac tttaggatta atttaagctg caaacagcag aaaaatgcaa aataacagtg
                                                                      120
                                                                      180
gcttaaatga aatagaaata ttttatctct tgaaaaagtt ctgataaaga cagtcaaatg
                                                                      240
ctagaagggc aactgtgttc cagaaggttc tcaaggagcc aggctacctc taacccactg
ctctgccatc tctaattcat gtcgtatgtc ctcagggtcc acaatggcag taagaacgct
                                                                      300
                                                                      360
cctcatcata tctgtgtttc aaatagtaga atggagagaa agagaagaaa aggaggcatt
aaggaaggtt ccagaagctg ccatttgaca cttctgttaa catttaattg gccaaaattt
                                                                      420
aatctcatat cgcataagct gtaagagatg ctggaaaact tatttgtctc cactctacat
                                                                      480
                                                                      540
ggacattatc agagtatttc tcaacagaga ggtctatgta ataatagtaa aaagtaagag
```

tggacacaaa	cctagtcctt	tacctttcag	tagaagtaaa	aatgctatat	taatatttac	600
tetetetete	tctctctc	tctctctc	tcatttttgg	ttttgacaat	caaattcagc	660
taaatatgat	tgaaactaaa	atcaaggaaa	atgcattata	ctctgttgtt	atggtaactg	720
gaatggtgaa	atgtgtggat	tattttcaca	ccttcaataa	tatgtttcta	accatatatt	780
ttttaaaaat	tgctgcaggg	tttgcttaat	gaccagagta	taaaggcaca	ttttttctc	840
agttggcaaa	aacacagttt	tgacaaattt	gacaagtttt	tgtagatctg	taatttattt	900
gatttaatta	aattttcatc	ttgttttcac	aatgagttat	tgaaaataaa	atctaaagct	960
ttaaacagga	aaattttaaa	tttgaatttt	cttggttgaa	ctacttatac	ttttcacttt	1020
caattcacta	acagaataaa	tacatcattc	cactgaatat	gagccatcca	tacaaagagt	1080
ccatgaccaa	atgcaatgtc	actaggtatt	taaagtaacc	tataaattat	gttctgtctc	1140
attgtccaca	aaatattaca	acctgcatat	ttggaaaaac	attttgttca	tgatatgtac	1200
atatatgagg	catgcatatg	gataaataca	tataaagttg	tgaaaattag	gcaaatttta	1260
tattttcgtc	cactcttgaa	actttcattt	ttcaaaaaca	aaatttaaaa	tgctaacttt	1320
taaaataaat	gtgccatagt	agcacaatat	gttaatattg	gggaaaactg	catggaaaat	1380
atacagaaat	gcttcatact	ttacaattct	tttgtacatc	ccatattatt	tcaaaagtta	1440
aaagttttaa	atatgttcag	tcttgaaatg	tatcagaaat	gtttatctaa	agttttgttg	1500
gtgttaagat	taatatatta	gtaatattac	acacagaaag	acagaaggta	aaagtaaagt	1560
tagtttgaat	atgactgtca	ttttaagtca	ttaacattta	actttaccaa	cttcatctca	1620
agttggccca	tatcactgcc	caacttaaac	acatggctac	atgcagcagg	taaagtacat	1680
ggcaggacta	ttgagatatc	aaggagtcac	tgtgtgtcag	gaaatgataa	agttccccag	1740
cgtctcctca	cctgtgtcag	gccgacttag	ggaaaccaca	ttctacgttc	ataaagagtg	1800
atctgcgggc	ttgaaaggca	agtaagcaga	aagaagtgtt	tatcccagca	attcatgaaa	1860
atgttgaaaa	aaaagaaaaa	ctaagtcagc	tttccttaga	acccaagttt	cggcctgcct	1920
tttaaaattt	tctctatcaa	agctgccacc	ttttttccag	atgctcaaga	taaaacactc	1980
aacacagaaa	tgcatgattt	tgttgctgag	ataccggttt	gttgtttaca	ctctgccctc	2040
ctatccattg	caccttccag	ttccgcttgc	tctcagtctc	cacctctgat	tgctacttac	2100
acaatttatc	ccatgaaaca	ccatcagatt	attccagcac	acaccagtat	ctctgggcct	2160
teeetggtge	actgcactct	ctcctttcca	cagageetgt	ggaaagagtg	gcacagtagc	2220
tggaggggca	cacagggtac	agagcacctt	tccccaccca	actcttgcgg	tgctgtagac	2280

ctgaggtggt	accatgaagg	aaacatggac	agttgagacc	acatgcaaga	gcccagacac	2340
acggctcaag	ctcccagggt	cagtgatagt	gtatagctag	ctgggaaccc	tgcactggcc	2400
ctgtgttcaa	catgagtggg	tcaccctaaa	agacatttca	gcgtggttct	gcctaccaaa	2460
tcttgcaaag	aaatacctct	ccactcagtg	agaagtgatc	cactagccag	getgeeetee	2520
tagacctgaa	ttaaccatag	agtcccagaa	ttattctata	ggcttgagcc	ccagcattct	2580
gtggggcatc	tggttgaccc	cacaggcagc	agggctagga	agtctgagag	tagcatctca	2640
aaagggtgaa	gaggetggee	cacaggggtc	ctgttcaggc	tgagagtgca	gctcctgaaa	2700
agcactgcaa	accctgaagt	tcccagcgtg	ggagggaggg	cgatttggag	aattgtgagg	2760
aaggcattcc	aaagtgctac	ggtgcccaag	tgaagactta	cgtcgagaag	aaatagaaaa	2820
atgacagctt	ttccccaagt	ggtaacaaga	attagctaaa	ccaagcctaa	ttgtatattc	2880
ttcccaattt	taacccattt	attaaatcac	tgaagctctc	ctgagcagaa	taaggggtag	2940
ggaaagaatt	cagaataatt	cagggaaaat	gcctcctcat	gaaaactcta	aaatttggaa	3000
aacggttggt	tcctagtaat	cgagatagct	atattttcct	tcacttacca	aaatgaaact	3060
taggaagttc	attctctttt	actcctaatc	tgcaaatacc	ttagtccagt	gaacaaatgt	3120
gaaccgaaag	agccaatctt	tcaaaataca	acctgagtgg	ctaaatgggg	ctatgtttta	3180
aatagaggca	agtggccatt	tgctgactaa	agatcacaca	tgtatactct	gagttccctg	3240
aaaacctaca	gctctgctca	actttgggac	ttccagagct	cacctgatct	accaatcagg	3300
cctggactgc	ttcaaccaat	cagggctcag	ctgtatcaaa	caatgggaac	tgagcatttg	3360
cataaacaaa	cctgactgga	aacttgggtg	ggaacttttg	ccataataac	tgaaccctct	3420
cttggttctc	tggatcacac	cttcatttta	caccaaaagc	tttgaatcac	ggtttgcaaa	3480
ctgttcactg	gaataaagtc	tctttcttcc	aaattccttt	tcagagaact	tttgttcaca	3540
gtccctatta	tccgagataa	atctgtaagc	aatatgtatg	tgatggaaaa	tgtttcttcc	3600
ttcctcccca	actttcaatc	cttgttcttt	tctaatcatc	ttatagataa	tgtctaagaa	3660
attggcttat	ttaagttaaa	agttttgact	tccttactac	tcatttgaaa	gtacaaaata	3720
cctcagttgc	acatgcctac	ctactacgtc	aacagtgtgc	tgctgcatat	taaaagagat	3780
ccaatttcaa	atcacctaga	aaaggctaaa	tcttactttt	tcttgcttta	gatgacctct	3840
ctctatatat	aaggctgata	tcagccacaa	acctcccctt	ccttgtgaga	ggagggcagc	3900
cttcaaactg	aagttcagag	cattgttgta	caatattcct	gaggtatatt	gctccccata	3960

ggattgggat ctgtgd	ccata gaacctataa	ı atgggattta	cacaagtttc	tgttattgtc	4020
cagggaataa atttto	ggacc acaaaagtga	aatatataat	tcccaatgcc	ttttaaatgt	4080
ataaatatgg acagca	agctc agtgcacttt	tcactggatt	aacagcatgc	tgctatattg	4140
cgatactgcc aaaaaa	agacc ttatatttca	ı aagcagaata	cattagtcct	agaaaaggag	4200
aagagcagct ctaggo	gtatg tccatgatco	ctctgtgaat	ctattgtctg	cttcattgcc	4260
tgaggcagaa caaaaq	gagca cgtggccaac	, aatgaggctc	tggatcagcc	cagcttgggt	4320
cctcggcctc aaacta	atggc ctcagcgaca	ı gtttcctgat	ttgcggagta	aatactactg	4380
tgagtatcca acacaa	attca gaggattgaa	ı tgaggttaat	taacttaatt	aacaagtatt	4440
aattaattaa ttaaaa	aacac taggtcacac	g cctgggccat	aataagctat	caataaacac	4500
ttactattgg tgttac	gcaat ctttactttt	atttaagtga	tgtaattact	ccaatgtact	4560
ttatttgagt gatgga	aatta tagatatata	ı tttataactt	atataagtgt	aagtagttac	4620
acttttggaa tatact	ttata caagtactta	ı tataggttat	attaaagtat	atatttataa	4680
catatttata ggatta	aatgt aagaatattt	tttataaaat	gatctaacat	gctaaaatat	4740
agaaattaat tagtaa	aaatt ataatttact	ttagcttgtg	tttatttgac	accaactacc	4800
tggacattta gtccat	tttac tgcagtactt	ctccaggtat	gattettggg	ccagcaccat	4860
cagcattacc tgggaa	aatga gttagaaato	g cacattetea	ggccccacca	caggcccata	4920
taaaaaccat ggattt	tagtg tatctagaac	gacaaaaatc	aaaacactta	gcttcattca	4980
ggaaaaaaat aattct	tgata ttgatagata	ı cctctcttca	cttttaaaag	tttcttctta	5040
tagaaaccag atctga	attgt attgttaaaa	ı ttaaacttgt	aaatttttc	acaacgaatt	5100
teetgtatgg tggtet	tatgt ttggggaaat	actcatcccg	gaactcaact	gtacagggtt	5160
gggcatgttt tacata	acaag tgtatgtcto	tcttcttgtc	ttccttctcc	cttgaaccct	5220
agteteeete eetgee	ctttt cagaagttto	cccctggagt	tctcagccta	ttctctttta	5280
tettteeate caaace	gtagt caccaatata	gtcctcttt	ctctctcaat	ctacacagca	5340
gaageeteea etgete	gcttt agaatccaga	ı gatatttcca	atcccattat	ccccaaagat	5400
gaagtctctc ttaaaa	aatcg agattctcta	ı ttttagtagt	ggtggctctg	tgttcatgct	5460
gttccctctg cctaga	aacag catttcttca	ı tattttcaca	tatttttaca	gcacatggca	5520
cataaaaagc acacaa	ataaa caccaacatt	ctgagttaaa	aatgtgaaat	gtcttttcct	5580
gcaaaaataa tatato	gcctg gtgtttgtco	: cagttcaata	cacatttatt	gactgcctaa	5640
tactttgcag gcatto	gaaca aagcatgggç	, tagaaataat	aacagtattt	tctccccaca	5700

ctgaagtagt	gtgcactcta	caaataggga	agatatatat	atcttcctta	tattatatat	5760
atttatatat	ataaatatat	atttatatta	tttatatata	tataaacata	tatatataaa	5820
tagattactt	tcacataatg	tcacaggtgt	agcaatagga	gagtacacac	agtggcttgt	5880
gaatactgag	gccaacttga	gagatcagaa	aaggtttta	ggagaaggtg	atgaagggct	5940
gaatatattt	taaaactgtt	aaatgtgttt	tcaaagggca	ataaacaccc	atatgttcca	6000
taaatattat	aaacagcatg	cttattcaag	ttagttcaga	ttatgttttc	aaaagcaaaa	6060
tagatttaag	tcacacttat	tctttccttt	aaataaaatg	ttcttcaagt	taaaagtatt	6120
atgaagtatg	tctgggaacc	attttcttgt	tggaggccct	taacatcttc	acatattccc	6180
aaatcagaaa	ttagcaaacc	attttgacat	ctccctcttc	ctcaattctc	tcatacaagc	6240
atccctaagt	catatccatt	gcatttccaa	tgtttttcaa	attattttt	cctttaacat	6300
ttgtattgtc	agtgccttat	ttttgcatct	cctaatttct	ttctagataa	catcctaatt	6360
ttttccccca	aatctagttt	tcatcccctc	caaatatctg	caagatatca	cagtgctctt	6420
taagcaaaac	aaatcggatc	acatttttct	cttatttaaa	tcttttatta	ttatgctcct	6480
ctaactagga	tgaatatgca	tcccagtttg	tccaaatgta	gatattccag	ttttatactt	6540
gctgactagc	ataattgtca	ggagtgtctc	ctttcactct	cagaagtgcc	tgttctgaat	6600
tcaaaattat	atagttagcc	ttctcattgc	cttcattatt	ttgttttaat	tcaataatct	6660
tacattaaaa	tcttcattta	taatgtgagt	cctgccatta	agagatgcaa	gattgctctt	6720
acacccggct	ttaccctttt	acaatttgag	ttcatcaaaa	tcatggatta	tgtcttaaaa	6780
acaactagta	tttaacacca	tgcctgccat	tgaataggca	tgtaatgatg	tttattaaat	6840
tttaaatagc	tacatttaaa	attgaaggtt	ttgttattaa	tcatattcta	tgtgaaacat	6900
ccttagatta	ttgaaagcat	ccatatgctt	ttcgacattc	ttttatatat	atatttttat	6960
tatactttaa	gttctaatgt	acatgtgcac	aatgtgcagg	tttgttacat	atgtatacat	7020
gtgccatgtt	ggtgtgctgc	acccactaac	tcgtcattta	cattaggtag	atctcctaat	7080
gctatccctg	ccccatcccc	ccaccccaca	acaggcccct	gcatgtgata	ttccccttcc	7140
tgtgtccaag	tgttctcatt	gctcaatttc	cacctatgag	tgagaacatg	tggtgtttgg	7200
tattttgtcc	ttgcgatagt	ttgctgagaa	tgatggtttc	cagcttcatc	catgtctcta	7260
caaaggacac	gaactcatca	tttgttatgg	ctgcatagta	ttccatggtg	tatatgtgcc	7320
acattttctt	aatccagtct	atcattgttg	aacatttggg	ttggttccaa	gtctttgcta	7380

ttgtgaatag	tgccgcaata	aacatacatg	tgcatgtgtc	tttatagcaa	catgatttat	
attcctttgg	gtatataccc	agtaatggga	tggctggatc	aaatggcatt	tctagctcta	
gatccctgag	gaattgccac	actgtcttcc	acaatggttg	aactagttta	cagtcccatc	
agcagcataa	gagtgttcct	atttctccac	atcctctcca	gcacctgttg	tttcctgaat	
ttttaagatc	accattctaa	ttggtgtgag	ataatatctc	gttgtggttt	tgatttgcat	
ttctctgatg	ggcagtgatg	atgacccttt	tttcatgtgt	ctgttggctg	cataaatgtc	
ttcttttgag	aagtgtctgt	tcatatcctt	tgcccacttt	ttgatggggt	tgtttgtttt	
tttcttgtaa	atttgtttga	gttctttgta	gattctggat	attagccctt	tgtcagatga	
gtagattgca	aaaattttct	cccattctgt	aggttacctg	ttcactctga	tggtagtttc	
ttttgctgtg	cagaagctct	ttagtttaat	tagatcctat	ttgtcaattt	tggctttcgt	
tgccattgct	tttggtgttt	tagacatgaa	gtccttgacc	atgcctatgt	cctgaatggt	;
gttgcctagg	ttttctccta	gggtttttat	ggttttagat	ctaacattga	agtctttaat	;
ccatcttgaa	ttaatttttc	tataaggtgt	aaggaaggga	tccagtttca	gctttctaca	
tatggctagc	cagttttccc	agcaccattt	gttaaatagg	gactcctttc	ccaatttctt	
gtttttgtca	ggtttgtcag	agatcagatc	attgtagatg	tgtggtatta	tctgagggct	
ctgttctgtt	ccattggtct	atctctctgt	tttggtacca	gtaccgtgcc	attttggtta	
ctgtagcctt	gtagttttgg	tgtggatgtc	ctttctgttt	gttagttatc	cttttgacag	
tcaggatcct	cagctgcagg	tctgttggag	tttgctggag	gtccactcca	gaatctgttt	
gcctgggtac	cagcagagcc	tgcagaacag	cgaaaattgc	tgaacagcaa	atgttgctgt	;
ctgatcgctc	ttctggaggt	ttcatctcag	aggggtacct	ggctgtgcga	ggtgtcagtc	1
tgcccctact	tgggggtgcc	tcccagatag	gctactcggg	ggtgaaggac	caacttgagg	;
aggcagtctt	tccattctca	gatcccaaac	tccatgctgg	gagaaccact	actctcttca	;
aagctcttcg	acagggacat	ttaagtctgc	agaggtttct	gctgcctttt	gtttggctat	;
gccctgcccc	cagaggtgga	gtctacagag	gcaggcaggc	ctccttgaac	tgcggtgggc	
tcccccagt	ttgggcttcc	tggccacttt	gtttacctac	tcaagcctca	gcaatggcga	
gcgcccttcc	cccagcctcg	ctgccacctt	acagttcaat	ctcagactgc	tgtgctagca	
atgagcaagg	ctccgtgggc	atgggaccct	ctgagccagg	cgcaggatat	aatttcctgg	
tgtgccgctt	gctaagacca	ttggaaaagc	gcagtatttg	ggtgggagtg	acccgatttt	
tcaggtgccg	tctgtcacag	ctttgcttgg	ctatgaaagg	gaattccctc	accccttgca	

cttcctgggt gaggcaatgg	ctccctgttc	ttcgggtcat	gctcgatgtg	ctgcacccac	9180
tgtcctgcac ccactgtcca	ataagccaca	gtgagataaa	cccagtacct	cagttggaaa	9240
tgcagaaatc accagtattc	tgcgttgctc	acactgcaag	ctgtagactg	gagctgttcc	9300
tattcggcca tcttggaact	gccctcactg	actcaacatt	atttttaaca	tgtttattta	9360
cacatttata aaatgatcac	tgagtactta	atacataatc	tagttgagca	atgtcctggt	9420
gatgcttgga tatgagaaaa	tgaaaaaaca	aacatctaat	tacagatgct	cctcaattta	9480
cagtgatgtt atttctcgat	taacctatca	taaattaaaa	atattgcaaa	tcaaaaatac	9540
acttaaacac ctaacttatc	aaacactata	gcttaagctt	ttcctaactt	aaaatgctca	9600
gaacactcac attaacctac	aaatttggac	tcctacattt	gggtaggcta	atgtaagtat	9660
tctgagccct ttaaggcagg	ctaggctaag	ctatgtttgt	gcatgacaca	aagcccattt	9720
tacaataaag tgttgaatat	ctcaggtaat	agtattatat	cacatatcaa	tagcccagga	9780
aaagatcaaa atttaaaatt	ttaagtacaa	tttctactaa	atgggcatca	ctttgacacc	9840
attgtaaagt caaaaaatca	taagtttggg	atcatctgta	aatgagggca	caattcccac	9900
aagaagattt cagaatcaga	ttcaagatat	tgtgaggaca	caaaagagga	agttatcaac	9960
tctcagggag tggaggggaa	aaaacggctt	tatgaaagaa	atgacttttg	ggcagtcttg	10020
gaagataagc aattgtaaat	aatcagtaga	actgcagtag	gacataagac	gagccatgga	10080
ttagcctaga caggttacat	agaggtcaga	gctcagagga	gattattggc	cagtccttgt	10140
aaacaacgat gagtgtctaa	agagtgtcat	gtaagagaaa	gagagaaaca	gtataaaaat	10200
tcataaaagt cagcctggta	gcagtgtgac	aagcgtactt	aaagaaaaag	acacttgccc	10260
taagtcaaca aagtttattt	cagaataaga	attatattaa	tatataggca	tctgaattca	10320
atagtatttt tgccaaaatc	aaggcataat	gtgtaaaaat	gtattcattt	atatcccacg	10380
ttgattgaag tcatttcttc	taattttcag	gttttagctc	tgcctatgca	cgtggatgag	10440
acctaggtct caatcaaggt	ctggcagttc	agaaggtcaa	gtcagaccat	caaccatggt	10500
agctacttca ttgaccagcc	tcacctagaa	tgagtataac	tgtgaagctt	ttcaattttc	10560
tttattattt tagccatact	gctatcatta	ggatatttga	cctctccaaa	cttcacgttg	10620
aaatttgatc cccaatgttg	aacatggggc	ttcatggaag	gtgtttgggt	aatgggggca	10680
gatccctcat gaatagatta	atcccctcct	taggcatggt	gatggtaagc	gaattctcac	10740
tctattagtt accaagagag	ctggttgtta	aaaagggctg	ggcctggtac	ctctctcccc	10800

tctccctctt	gcttcctttc	tcaccatgca	atctctgcac	attccagctc	cccttcacct	10860
tctgccatga	gtggaagcag	cctgagacac	tcaccagatg	cagatggcca	attttaaact	10920
tttttcgaaa	tcagaattgt	gagccaaata	aatattttt	ctttataaat	tatcagtgtt	10980
ctttactagc	aacacaagtg	aactaagaca	catactgtgt	ttgctttctc	tttcccatcc	11040
cttaatctga	gtagaaatta	taactttgac	aaattcaatc	attaaattta	ctccaaaagg	11100
tggtaaacta	attcaaaact	ttctcctccc	tcacattagg	ccagaattgt	atgatatctc	11160
tggcaacatc	ttctcctttc	cactcctttt	agagtaaaca	gagatgaatt	tatgcattgg	11220
ttgcctgtac	gtggtatgag	aacatccttg	gcctcagttt	acttcgttca	gatttcatca	11280
gttgctagta	gcttttgctg	atatgtgaat	gttctgtgct	tattaagaaa	ggttattatt	11340
gtggtaacaa	aatctacctt	taaatctagc	gttataaatt	caattatttt	actgttgatc	11400
cctttaaatt	caccatattc	catgaataga	aagtgtctag	gacttggtcc	tgtgggaatt	11460
tcttatttta	agtaaacact	gagtgctaat	gcatgtcagc	tctcctcttg	ccattttgag	11520
attttcaaga	tcttgctagc	tttgaaagtt	gaattgggtg	aaataaaaat	gctgcaatat	11580
taaaaaaatt	taaatctcaa	agacctcaag	acatagttca	agacttttaa	aagttcaagg	11640
gtttgtcaat	aaataataaa	gaatcatttg	ttgctttaac	aaagaacagc	aaaggatgtg	11700
taacataact	ggaacattca	ataatggctc	tatcaaattc	ctaaaataag	cttaaagaaa	11760
cataagatct	acatattaat	atttatgact	gtttctgaaa	aggatatgag	ttaaaatctt	11820
tcccaacagt	tgatattaaa	caaaatgttt	gtccaaacaa	aaaaacagaa	atttaattgt	11880
atttttaatt	aaaatgatgt	aactcatatt	atatgccaat	taaaaaataa	agggaaccac	11940
tgggggattg	gtcatttaaa	aaactgatat	aggggctggg	cgaggtggct	catgcctgta	12000
atcccagcac	tttgggaggc	cgaagtgggc	ggatcacctg	aaggcaggag	tttgagacca	12060
gcctgaccaa	catggagaaa	ccctgtcttc	tactataaat	acaaaattag	ctgggcgtgg	12120
tggtgcatgc	ctataatccc	agctactcag	gaagactaag	gcaggagaat	cgcttgaacc	12180
tgggaggcag	aggttgtggt	gagccgagat	tgcaccattg	cactccagct	tgggcaagaa	12240
gagtgaaatt	ctgcctcaaa	acaaaacaaa	aaactaatat	aggtgatgaa	aattgtggct	12300
gttgttataa	attgttactg	gtcaatgagt	ttactacaga	aacgtgtaca	cacacgtata	12360
caataaatgc	tatatattac	atgaatttga	aaaataatat	gcattatggg	acagcaactt	12420
caacttttca	cagattttaa	atgcaaacat	ttgaaaaatg	aaggaagaag	agaatataga	12480
agtggagaag	gagctgggga	aaaaggaaag	gaaggaaatg	agaaatacac	cttggataaa	12540

caaactgata	agttggtgca	ttttgaaaag	agagttggat	agagaactga	accatattgg	12600
taactggaga	tatgactcat	tatttcatgt	aatgatggta	ttaagcacca	actgggctaa	12660
gaatgcatta	aaggaaaaaa	cataggcatt	ggaaacagga	gagctgcgtt	caaatcctgg	12720
acctatagtt	aaagctccct	aaggactcac	tttccttatg	tttcaagtaa	gagggagaga	12780
ggtactcatt	attcttacct	taaaggttaa	tataaaaaat	taaatgctaa		